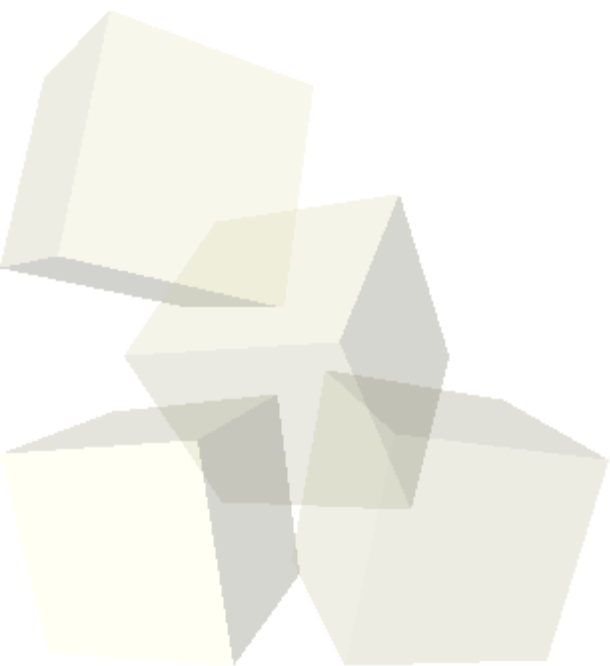




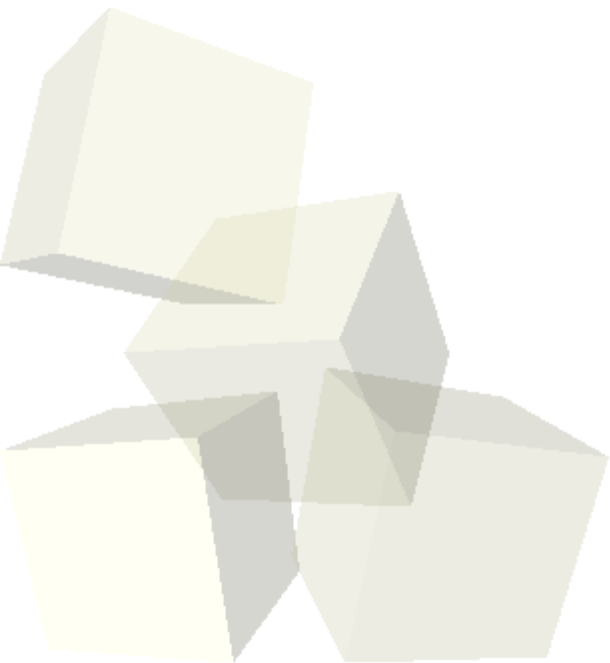
11-18-2005





Opening Discussion

- Do you have any questions about the quiz?
- What did we talk about last class?





- An alternative to DP that can be almost as fast is memoization. In this approach we write the recursive solution, but pass in an extra argument that stores solutions we have already found.
- When the function runs it checks the stored values before doing a recursive call so it won't solve subproblems that it has solved previously.
- For some problems this method is a lot easier to think about. Memoization can also be used for problems that don't have optimal substructure so DP can't be applied.



References in Perl

- Since living without references is such a pain, let's talk really quickly about how to use references in Perl.
- A reference is a scalar value that can refer to a scalar, a list, or a hash. You get a reference to a variable by prefixing it with \.
- Inside of a function you treat the reference like a scalar, but when you want to pull out what it refers to you put an extra special symbol in front. You use \$\$ to dereference a scalar reference, @\$ to dereference a list and %\$ for a hash.



- The Basic Local Alignment Search Tool is the most widely used tool for doing sequence searches.
- You can either use the web interface directly or you can download BLAST and run it locally.
Today we are going to look at the web interface.
The advantages of the web interface include ease of use and the fact that the databases are always up to date.
- The downside of the web interface is that you can't run a large number of searches easily.



Reminders

- Assignment #9 is due on Monday.

